



File Code: 3420

Date: December 23, 2004

Route To:

Subject: Fifth Year Douglas-fir Tussock Moth Monitoring Results

To: Frank Martinez, District Ranger, Sacramento RD

This letter documents our fifth year Douglas-fir tussock moth (DFTM) male moth monitoring efforts on the Sacramento RD and portions of the Mescalero Apache tribal lands. As indicated in our 3420 Biological Evaluation, (01-R3-01), sent to you in October 2000, DFTM caterpillars were observed in considerable numbers during the summer of 2000 migrating and pupating under tables, tent pads, and various other structures at the Dale Resler Boy Scout Camp. Several of the boys exposed to the caterpillars also developed an allergic reaction known as "tussuckosis." This outbreak, however, was short-lived and collapsed the following year due to heavy pupal parasitism by parasitic flies and wasps.

During the summer of 2000, we also conducted a DFTM male moth trapping survey at several locations on the Sacramento RD and portions of the Mescalero Apache Indian Reservation to determine if DFTM populations were increasing elsewhere in the Sacramento Mountains. This monitoring survey uses sticky traps baited with a synthetic version of the female moth sex attractant pheromone, which is one thousand times weaker than the natural pheromone emitted by a female moth. When average trap catches reach 25 or more male moths, visible defoliation may be expected to occur within the next two years.

Five sticky traps were placed at Devils Canyon, the Observatory along SH 244, Dale Resler Boy Scout Camp, James Ridge Lookout, Bear Spring, FS 5662, Karr Canyon, Rio Peñasco, and FS 64 on the Sacramento Ranger District and Tularosa Canyon and an area 12.3 miles NW of Elk-Silver Campground on Mescalero Apache Tribal lands. The data collected from these traps were also summarized in the 3420 Biological Evaluation mentioned above and are also summarized in Table 1 below.

In 2001, five sticky traps were also placed at Sleepy Grass Picnic Area and Apache Campground. The trapping locations are shown in Figure 1 below. These areas were again monitored for DFTM male moth activity in 2001, 2002, and 2003. Trapping results for the 2001-2003 surveys were summarized in our 3420 letter dated January 30, 2004. These results along with those of our 2004 monitoring efforts are also summarized in Table 1.

Briefly, in 2000, DFTM male moth trap catches were somewhat variable, but well below the average threshold of 25 males per trap needed to predict that visible defoliation would occur to host trees within the next two years. A total of 108 male moths were trapped in 2000. In 2001, male moth trap catches declined to 11 moths and in 2002 and 2003 only 1 male moth was caught. One male moth was also trapped in 2004, indicating DFTM populations were and are currently at low, endemic levels (undetectable levels) in the Sacramento Mountains. Based on these data, no visible DFTM defoliation is expected to occur in the Sacramento Mountains in 2005.



Table 1. 2000-2004 Douglas-fir Tussock Moth Trap Results

	LOCATION	Total Moths 2000 In 5 Traps	Total Moths 2001 in 5 Traps	Total Moths 2002 in 5 Traps	Total Moths 2003 in 5 Traps	Total Moths 2004 in 5 Traps
Sacramento RD, LNF	1. Devils Canyon	3	0	0	0	0
	2. Observatory along SH 244	8	0	0	0	0
	3. Dale Resler Boy Scout Camp	10	5	0	0	0
	4. James Canyon Lookout	22	1	1	0	0
	5.. Bear Spring	17	4	0	0	0
	6. FS 5662	24	0	0	0	0
	7. Karr Canyon	0	0	0	0	1
	8. FS 64	10	0	0	0	0
	9. Rio Penasco	1	0	0	0	0
	13. Sleepy Grass PA	N/A	0	0	0	0
	14. Apache CG	N/A	0	0	0	0
Mescalero Apache Tribal lands	10. Tularosa Canyon	7	1	0	0	0
	11. On 244, 10.8 mi to Elk Springs & 1.5 mi on rt dirt road	6	0	0	1	*

Note: There is no location number 12 in the above table or on the map showing the locations trapped.

* At the time the traps were retrieved, the road to this plot on the MAIR was impassable. These traps will be collected at a later date

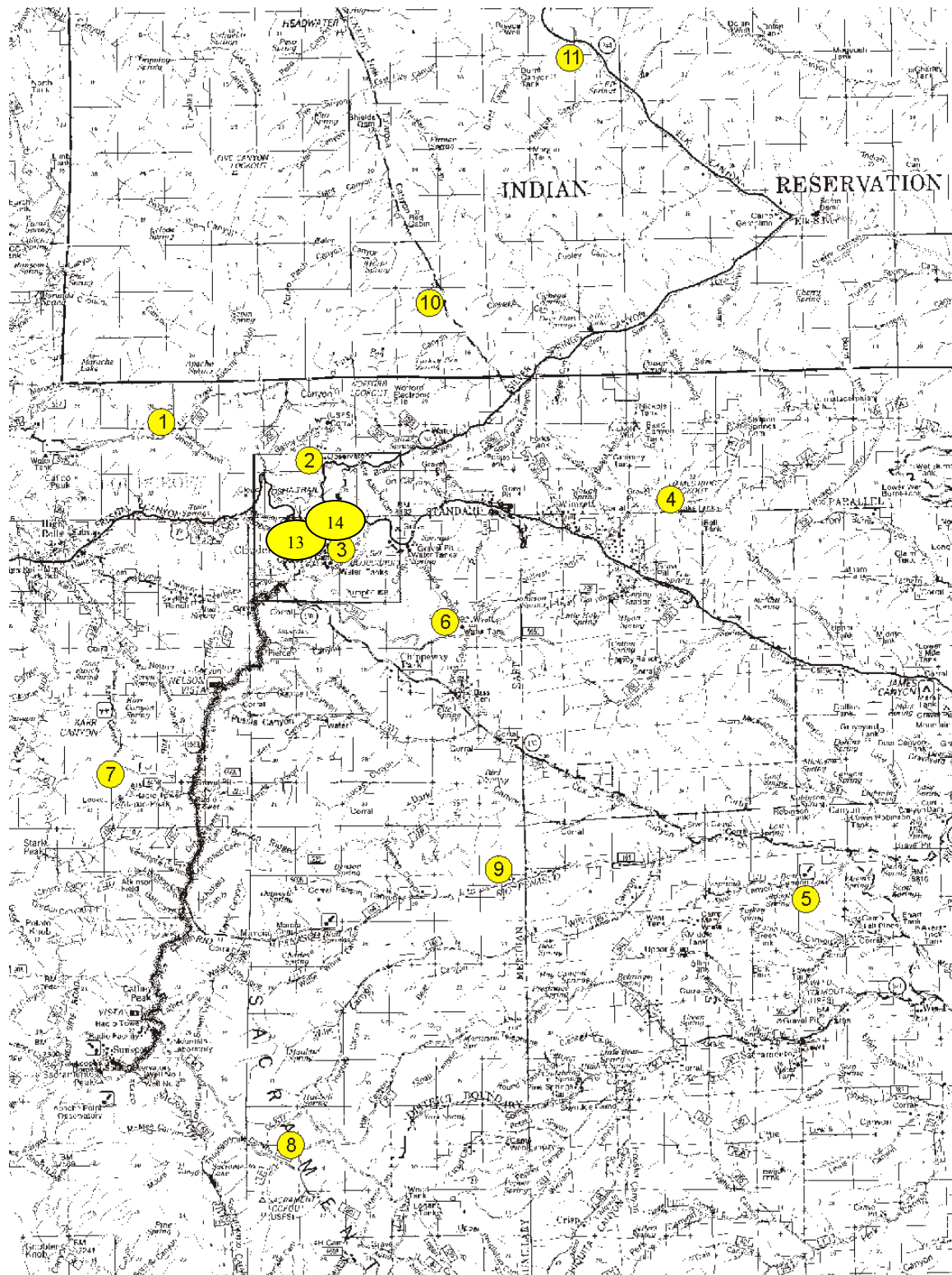


Figure 1. Location of Douglas-fir tussock moth trapping plots 2000-2003, Sacramento Mountains, New Mexico. Location 13 and 14 were added in 2001.

If you have any questions relating to this survey, please contact me at (505) 843-3287 or e-mail me at trogers@fs.fed.us.

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